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10/665,051	09/18/2003	Joseph Edward Coyne		5483

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EXAMINER

PECHHOLD, ALEXANDRA K

ART UNIT PAPER NUMBER

3671

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/665,051

Applicant(s)

COYNE, JOSEPH

Examiner

Alexandra K Pechhold

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/18/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: applicant appears to list separate claims 1-12, though they cannot be treated as separate claims, since it is unclear in claims 2-12 what claim they are dependent upon. As applicant see in the prior art patents, the dependent claims recite which claim above they depend from; for example in Durkee (Re 28,764), claim 2 starts out "An adjustable hand rake according to claim 1...", which thereby includes all of claim 1 plus claim 2; claim 4, for example, is dependent on claim 3, which is dependent on claim 1, so therefore claim 4 includes all of claims 1 and 3. Since it is impossible to decipher which claims are dependent upon which, the Examiner is treating the listing of claims 1-12 as simply one independent claim. The Applicant needs to amend the claims so they are either separate claims or one long independent claim. For the purpose of examination, the Examiner is treating the limitations as belonging all to one, individual claim.

Drawings

2. The drawings are objected to because they should be numbered, not lettered. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnes (US 4,831,835) in view of Speer et al (US 2,510,936) and Brooke (US 2,205,827) and Eads (US 3,724,188).**

Bonnes discloses a self-adjusting roof rake-head comprising a central housing support structure, seen as socket end section (16), a plurality of deeply curved tines, seen as tines (34), and a female flange fitting, seen as handle-receiving socket (19), all integrally formed. Bonnes illustrates the self-adjusting roof rake-head being a one-piece unit made of lightweight material, which Bonnes discloses in column 2, lines 54-69 as thermoplastic resin, which inherently can have the characteristics of flexibility, resilience, molecular memory and durability. Bonnes discloses the rear support wall having an opening, seen as the opening at the end of socket (19) and wall therearound, containing a female flange fitting, seen as the threads in the socket (19) for the handle. Bonnes discloses attaching a telescopic pole, not shown but disclosed as a handle in column 3, lines 1-2. Bonnes discloses a central housing support structure having a top surface plate, seen as the top surface of section (16), a *convex* front support wall, seen as the horizontal reinforcing members (by reference numeral 25 in Fig. 4), interior support walls, seen as the walls of the section (16), a rear support wall, seen as the rear

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of the section (16), and flange fitting and non-parallel side support walls, seen as the exterior walls of section (16). Bonnes illustrates in Fig. 4 the claimed recitation of the side support walls extending forward to the lateral ends of said convex front support wall. The tines (34) of Bonnes are deeply curved tines extending from the front support wall and are entirely unconfined and unencumbered throughout the length of the tines.

Bonnes fails to disclose the front support wall being convex. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the horizontal shape of the front support wall of Bonnes to be convex, since such a minor structural modification to the shape of a support wall would not alter the use of the rake.

Bonnes also fails to disclose the two shortest tines located at the outer edges, left and right, of the convex front wall, with the remaining tines progressively longer the closer they are located to a center tine, which is the longest tine, creating a wedge-shaped configuration at the tine tips. Speer teaches such a configuration for the tines shown in the embodiment of Fig. 7. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tines of Bonnes to have the two shortest tines located at the outer edges, left and right, of the convex front wall, with the remaining tines progressively longer the closer they are located to a center tine, which is the longest tine, creating a wedge-shaped configuration at the tine tips, as taught by Speer, since Speer states in column 3, lines 9-18 that such an embodiment provides particular advantages over other embodiments. With respect to applicant's "whereby" statement, it has been held that the functional "whereby" statement does not

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define any structure and accordingly cannot serve to distinguish. *In re Mason*. 114

USPQ 127, 44 CCPA 937 (1957).

Bonnes also fails to disclose the tines of varying length, width and curve radius, and the tines immediately adjacent to the left and right of the center line being equal in width to the center tine, all other being narrower in width. Brooke teaches tines (10) and (60) seen in Figs. 1 and 8, which differ in width from each other. Brooke states on page 3, lines 39-45 that the tines (60, 60) can be used more effectively to pick up weeds. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tines of Bonnes to have varying length, width and curve radius, and the tines immediately adjacent to the left and right of the center line being equal in width to the center tine, all other being narrower in width, since Brooke points out on page 3, lines 39-45 that differing tines can serve different advantageous purposes.

Bonnes also fails to disclose all tines have an upper tine plane with a lower support ridge perpendicular to and located along the center axis of the bottom side of the upper tine plane, and the lower width of the support ridges being narrower in width than the upper tine plane, and the depth of the lower support ridge of all tines at the front support wall being approximately twice the width of the upper tine plane, and said lower support ridges along the bottom side of the upper tine plane taper from the front support wall to a point near the tips of the tine, and the tine tips being equal in depth to the upper tine plane and being convex from side to side. Eads teaches a rake with tine shaped sections (52) each having a longitudinally extending rib (54) which gradually diminishes from the height from the section (36) on downward, with the extremities of

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the free ends of the tines being beveled (see Figs. 1, 3, and 5; column 3, lines 64-68 and column 4, lines 1-20). Eads notes that this construction is preferred as it provides the necessary flexibility with sharp corners suitable for thatching, though other cross-sectional configurations and free end constructions can be utilized. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tines of Bonnes to have an upper tine plane with a lower support ridge perpendicular to and located along the center axis of the bottom side of the upper tine plane, and the lower width of the support ridges being narrower in width than the upper tine plane, and the depth of the lower support ridge of all tines at the front support wall being approximately twice the width of the upper tine plane, and said lower support ridges along the bottom side of the upper tine plane taper from the front support wall to a point near the tips of the tine, and the tine tips being equal in depth to the upper tine plane and being convex from side to side, as taught by Eads, since Eads states in column 4, lines 1-20 that such construction is preferred as it provides the necessary flexibility with sharp corners suitable for thatching, though other cross-sectional configurations and free end constructions can be utilized.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
6. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Pechhold whose telephone number is (703) 305-0870. The examiner can normally be reached on Mon-Thurs. from 8:00am to 5:30pm and alternating Fridays from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703)308-3870. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.


Thomas B. Will
Supervisory Patent Examiner
Group 3600

AKP
6/14/04